



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION I

5 Post Office Square, Suite 100 Boston, MA 02109-3912

June 23, 2011

Winoma Johnson, P.E.
NAVFAC MIDLANT (Code OPNEEV)
Environmental Restoration
Building Z-144, Room 109
9742 Maryland Avenue
Norfolk, VA 23511-3095

Re: Draft Sampling and Analysis Plan for the Former Derecktor Shipyard

Dear Ms. Johnson:

Thank you for the opportunity to review the *Draft Sampling and Analysis Plan* (SAP) for the former Derecktor Shipyard Marine Sediment dated May 2011. The document presents the sampling design and the data assessment requirements in accordance with the *Uniform Federal Policy for Quality Assurance Plans* and *EPA Guidance for Quality Assurance Project Plans*. Detailed comments are provided in Attachment A.

Throughout the SAP, reference is made to 'limiting COCs' that were the major risk drivers identified in the ecological risk assessment. However, zinc and copper contributed to risk as noted in the ecological risk assessment and it is possible that they could drive risk in the vicinity of the piers. EPA does not agree that actions should be limited based only on the concentrations of certain contaminants. Zinc and copper concentrations that exceed the BPRG and TBT concentrations that exceed the NOEC likely contribute to risk and sediment containing such concentrations should be either assessed to demonstrate no excess risk or managed to reduce risk as governed by federal law. The SAP must acknowledge this.

EPA's comments that were e-mailed on February 7, 2011 on the Navy's sampling plan revisions of December 21, 2010 included the following:

- 1) EPA identified 24 locations around and under Pier 1 and nine locations around Pier 2 where zinc and copper samples are needed. Why hasn't this SAP included all these locations?
- 2) EPA requested that TOC be collected for all samples to better assess potential risk. That has not been done for this SAP. TOC samples are proposed only in selected locations.
- 3) EPA indicated that step out sampling for asbestos may be required depending on the analytical results. Also, if damaged asbestos-containing material is present at Pier 2, asbestos samples should be collected there as well. These are not discussed in the SAP.

4) EPA requested that details for the proposed multi-beam sonar survey be provided in the detailed sampling plan for evaluation. However, no details were included in the SAP for this survey. Please provide the details for this work.

Please explain why the Radioisotope analysis of the sediment cores is not discussed. It was included in the physical data collection plan in the December 15, 2010 Conceptual Sampling Plan.

I look forward to working with you and the Rhode Island Department of Environmental Management toward the cleanup of the Derecktor Shipyard. Please do not hesitate to contact me at (617) 918-1385 should you have any questions.

Sincerely

Kymberlee Keckler, Remedial Project Manager Federal Facilities Superfund Section

## Attachment

cc: Gary Jablonski, RIDEM, Providence, RI
Darlene Ward, NETC, Newport, RI
Bart Hoskins, USEPA, Boston, MA
Ken Finkelstein, NOAA, Boston, MA
Steven Parker, Tetra Tech-NUS, Wilmington, MA

## ATTACHMENT A

Page	Comment
p. 3, Executive Summary	The third paragraph states that sampling in 2004 detected lower contaminant concentrations around Pier 1. This statement needs to be retracted because two aircraft carriers were docked on either side of Pier 1 and no samples were collected in 2004 along most of Pier 1.
p. 9, Worksheet #2	Please check the November 11, 2010 date for scoping session 2. A conference call was held on November 22, 2010. See also worksheet #9b that refers to November 22, 2010.
p. 35, §11.2	Please change the RPRG for lead to 168 mg/kg.
p. 36, §11.2	The third paragraph states that non-detected results with associated LOD values greater than the PAL will be treated as values that are less than the PAL for the purposes of making decisions. This is not appropriate. A conservative approach is required and in such
	situations non-detected results greater than the PSLs shall preferably be treated as exceedances or at a minimum as data gaps. Please edit the document accordingly. The remainder of the paragraph is appropriate in that such data shall be evaluated in concert with the rest of the data to determine what action is necessary.
p. 37, §11.4	The second paragraph assumes that if no PALs are exceeded during this sampling, the team would recommend no further investigation or remedial action. This assumption disregards the existing data that identified unacceptable risk. If no PALs are exceeded during this sampling round, at a minimum, the entire data set should be evaluated by the project team. Confirmation sampling in selected areas should be completed before a no further action can be agreed to. Also, the presence of the aircraft carrier on the north side of Pier 1 will hinder the collection of sediment samples from their preferred locations. Because those sample locations are considered important for decision-making, that data gap will have to be evaluated and addressed before a remedy is implemented or a no further action decision is rendered.
p. 38, §11.4	a) The second bullet needs to be revised. Exceedance of the PALs for copper or zinc will prompt the need for a risk evaluation and possibly a more detailed risk assessment depending on the analytical results.

b) The penultimate sentence in the last paragraph expresses that additional investigations are not expected. However, based on the spatial distribution of the planned sample locations, EPA believes that

additional investigation to better define the limits of detected

contamination (i.e., a pre-design investigation) is possible and could

be necessary to support a remedy. This sentence should be deleted.

p. 41, §13

This worksheet states that previously-collected data will not be used in the development of the FS. EPA does not accept that statement. Previously-collected data should be considered when evaluating the site sediment. Also, the spatial distribution of the proposed samples is large, so all available data need to be considered to reduce errors in characterizing the extent of contamination.

p. 44, §14.1

Will the sediment stability cores be collected by ERDC? Please clarify the SAP.

p. 46, §14.4

Please include any reports received for the physical data collected in addition to the summaries mentioned in the text as appendices.

p. 58, Worksheet 18

Please clarify the intent regarding the collection of TOC samples. Based on this worksheet, there should be 104 TOC samples including 58 surface samples and 46 subsurface samples (assuming one for each subsurface interval). However, Worksheet 20 lists only 81 TOC samples, suggesting that only 23 subsurface samples will be collected. This appears inappropriate and it is not clear which depth intervals will be sampled. The scope of TOC sampling should be discussed.

p. 64, Worksheet 19

- a) For TBT, holding time references "frozen < 18°C." Should this be °F or -18°C? Please correct.
- b) For TOC holding time, the 1988 Lloyd Kahn method specifies fourteen days to analysis if held at 4°C. Please correct.

p. 66, Worksheet 20

- a) According to Worksheet 18 and Figure 11-1, there are 38 locations where cores will be collected for copper and zinc analysis. Therefore, there should be 114 sample locations for these metals, not 93.
- b) Since equipment blanks are listed in this table, source blanks will be required. Please list the required source blanks.
- c) Temperature blanks will also be used for this project. Please list them or add a note.

Figure 11-1

- a) Please relocate the label for DSY-22 because it is covering a sample location.
- b) The December 2010 sampling plan, included samples around the end of Pier 1. However, those sample locations have been omitted from the plan depicted. Please add location AD1 and X1 as orange symbols.
- c) It is possible that the presence of the carriers inhibited and still inhibits the clockwise current flow that was measured before the

presence of the carriers at Pier 1. If correct, then a monitoring point southwest of the end of Pier 1 would be appropriate based on the possibility that the counter current flow in the presence of the carriers is redirected to the southwest rather than continuing north under the carrier and past the piers.

Appendix F, p. L-2-5

Regarding the last paragraph, when recoveries are less than specified this will have to be noted. EPA understands the desire to maintain the sample depth interval for sample identification purposes, but it should be known when recoveries are less than specified and what the recoveries actually were. That actual recovery data need to be presented, preferably concomitant with the analytical results.